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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,933	03/06/2002	John C. Karamanos	0003-029	7363

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EXAMINER

NORMAN, MARC E

ART UNIT PAPER NUMBER

3744

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/092,933	Applicant(s) KARAMANOS ET AL.	
	Examiner Marc E. Norman	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9,12-19,22,26-28,30-42 and 45-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4-9,12,13,22,28,30-33,45-50,53-56,58 and 59 is/are allowed.
- 6) ☒ Claim(s) 14-17,26,27,34,35 and 38-41 is/are rejected.
- 7) ☒ Claim(s) 18,19,26,37,42,51,52 and 57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 34 is rejected under 35 U.S.C. 102(e) as being anticipated by Moore et al.

As per claim 34, Moore et al. discloses a ventilation flow control system comprising a first control unit 218 for controlling airflow into a room, including a duct 202/204, flow controller (supply fan SF) mounted in the duct, and sensor 206 also mounted in the duct; a second control unit 212 for controlling airflow out of a room, including a duct 202/204, flow controller (return fan RF) mounted in the duct, and sensor 226 also mounted in the duct; and control unit 300 receiving feedback signals and providing control signals to the flow controllers (see Figures 2 and 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 14-17, 26, 27, 35 and 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al.

As per claims 14-17, 26 and 27, Moore et al. teaches plenum 202, flow controller SF, and flow sensor 208 installed as a single unit onto supply duct 204. Moore et al. does not teach the control unit having an electrical disconnect. However, official notice is taken that, despite Applicant's previous arguments, a reasonable interpretation of the term electrical disconnect is anything by which an electrical connection may be broken (see for example the newly cite Efron et al. reference which teaches electrical connect 114 simply being an electrical outlet as shown in Figure 1). Accordingly, it would have been obvious to one of ordinary skill in the art to provide a means of disconnecting power to fan SF when the system is not in use. Also, it is generally well known to run electrical equipment using different levels of voltages and, as such, would have been obvious to include an electrical converter in order to control the voltage to the fan.

As per claim 35, while Moore et al. does not specifically teach a thermal coil in the supply duct, official notice is taken that such are common in the art of HVAC systems and would have been obvious to one of ordinary skill in the art at the time of the invention to combine with

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the system of Moore et al. for the purpose of heating or cooling the air entering the space in order to provide temperature comfort.

As per claims 38 and 39, again official notice is taken that, despite Applicant's previous arguments, a reasonable interpretation of the term electrical disconnect is anything by which an electrical connection may be broken. Accordingly, it would have been obvious to one of ordinary skill in the art to provide a means of disconnecting power to units 212 and 218 of Moore et al. for the purpose shutting down power when the system is not being used. Also again, it is generally well known to run electrical equipment using different levels of voltages and, as such, would have been obvious to include an electrical converter in order to control the voltage to the fan/controller.

As per claims 40 and 41, official notice is taken that this is simply a duplicate of the second flow control unit of claim 34, and would have been obvious to combine this feature with the system of Moore et al. to control overall air flow in the case where multiple return ducts exist within a system.

Allowable Subject Matter

Claims 1, 2, 4-9, 12, 13, 22, 28, 30-33, and 45-59 are allowed.

Claims 18, 19, 36, 37, 42, 51, 52, and 57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc E. Norman whose telephone number is 571-272-4812. The examiner can normally be reached on Mon.-Fri., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MN



MARC NORMAN
PRIMARY EXAMINER